SUBSTITUTE SPECIFICATION

What we claim is:

1. An acyl ribonucleoside or an acyl deoxyribonucleoside compound wherein the acyl group or the acyl groups is/are selected from the group consisting of a fatty acid with 10 to 20 carbon atoms, 3-phenyl-propionic acid, 12-hydroxy-stearic acid, octadecanoic diacid, hexadecanoic diacid, azelaic acid, and octadecenoic diacid, and mixtures thereof, wherein in the case of octadecanoic diacid , hexadecanoic acid, azelaic acid or octadecenoic diacid, one or both COOH groups of the acid can be esterified with a nucleoside.

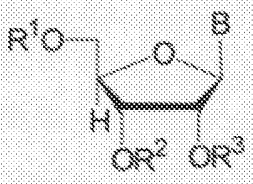
2. A compound according to claim 1 selected from the group consisting of palmitoyl uridine, 5'-O-palmitoyl uridine, palmitoyl guanosine, palmitoyl adenosine, palmitoyl cytidine, oleyl uridine, 5'-O-oleyl uridine, oleyl guanosine, oleyl adenosine, oleyl cytidine, stearoyl uridine, 5'-O- stearoyl uridine, 3-phenyl-propionyl uridine, the monoester of uridine with octadecanoic diacid, the diester of uridine with octadecanoic diacid, the monoester of uridine with hexadecanoic diacid, the diester of uridine with hexadecanoic diacid, the monoester of uridine with azelaic acid, the diester of uridine with azelaic acid, the monoester of uridine with octadecenoic diacid, the diester of uridine with octadecenoic diacid and 12-hydroxy-stearoyl uridine.

3. A compound according to claim 1 wherein the fatty acid has 16-18 carbon atoms.

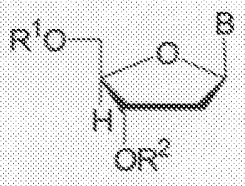
4. A compound according to claim 3 wherein the fatty acid is a carboxylic acid.

5. A cosmetic composition comprising

(a). an acyl ribonucleoside or an acyl deoxyribonucleoside having the following formulae I or II,



I



II

wherein

B is a nucleobase-moiety,

R^1, R^2 and R^3 are independently selected from the group consisting of

a) hydrogen,

b) a saturated or unsaturated, linear or branched acyl radical with 3 to 22 carbon atoms, optionally substituted with one or more substituents selected from the group consisting of hydroxy, hydroxy-alkyl, amino, amino-alkyl, mercapto, mercapto-alkyl, halogen and thiolanyl,

c) a saturated or unsaturated, linear or branched dicarboxylic acid radical with 3 to 22 carbon atoms or its derivative in which the –COOH-group that is not esterified with an OH-group of ribose or deoxyribose is replaced by -$CONR'_2$ or by $CONR'_3{}^+S^-$ (wherein R' is a hydrogen atom, a saturated or unsaturated, linear or branched alkyl radical with 1 to 6 carbon atoms, or an aryl radical, or an aralkyl radical or an aralkylene radical and wherein S^- a counter ion) or by COHal (wherein Hal is a halogen atom) or by COSH (wherein S is sulphur),

d) a saturated or unsaturated, linear or branched dicarboxylic acid diradical with 3 to 22 carbon atoms,

e) an arylaliphatic acid radical and derivatives thereof, optionally substituted with one or more substituents selected from the group consisting of hydroxy, nitro, alkyl, alkoxy and halogen and

f) a benzoic acid radical, optionally substituted with one or more substituents selected from the group consisting of hydroxy, nitro, alkyl, alkoxy and halogen

and wherein in the case of formula I at least one of the substituents R^1, R^2 and R^3 is not hydrogen and in the case of formula II at least one of the substituents R^1 and R^2 is not hydrogen and

(b). an auxiliary and/or an additive suitable for use in the cosmetic composition.

6. A method of using the compound according to claim 1 for the treatment of human skin that has been damaged by UV-A radiation or by UV-B radiation which comprises applying the compound to human skin.

7. A process of making the acyl ribonucleoside or the acyl deoxyribonucleoside compound of claim 1 which comprises reacting ,optionally in a non-toxic solvent, a ribonucleoside or a deoxyribonucleoside with an acyl group donor in the presence of an enzymatic catalyst ,optionally in soluble or in immobilized form.

8. The process of claim 7, wherein the acyl donor is the corresponding carboxylic acid.